

*Entry Approved-Specification Only*  
*EC 11/19/07*

47833

**Patent Application**

**of**

**MICHAEL KÜHN**

**and**

**HUBERTUS SCHMIDT**

**for**

**HYDROPNEUMATIC SUSPENSION**

**Field of the Invention**

The present invention relates to a hydropneumatic suspension having at least one suspension cylinder and at least one suspension accumulator, in particular a hydraulic accumulator with a pilot-actuated valve. Specifically, a proportional valve opens or blocks a fluid-carrying connection between suspension cylinder and suspension accumulator.

**Background of the Invention**

Hydropneumatic suspensions are used, for example, as rear-axle suspensions in tractors or other machines. If a fluid-carrying connection is established between a suspension accumulator and a suspension cylinder by the pilot-actuated valve, especially one in the form of a conventional hydraulic accumulator or working cylinder connected to the respective wheel set of the tractor or machine, the wheel axis for the respective operating application is correspondingly spring-suspended. If it is now desired to use the machine, especially one in the form of a tractor, to carry out operating processes such as plowing of a field with plowing equipment, the suspension is to be blocked. Specifically, the connection between suspension